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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/773,274	01/31/2001	Jorge Esteban Silva	DP-304554	2005

7590

11/25/2002

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EXAMINER

CUEVAS, PEDRO J

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 11/25/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/773,274

Applicant(s)

SILVA ET AL.

Examiner

Pedro J. Cuevas

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,10-17 and 20-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,10-17 and 20-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 September 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Drawings

1. The corrected or substitute drawings were received on October 19, 2002. These drawings are acceptable.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 2, 10-17, and 20-28 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 10-17 and 20-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,625,244 to Bradfield in view of U.S. Patent No. 5,254,896 to Bradfield et al., further in view of U.S. Patent No. 5,479,060 A to Giamati et al.

Bradfield disclose fan and slip ring assembly for an electric machine, comprising:

a rotor (column 2, line 21) for said electric machine, said rotor comprising a rotatable shaft (43) along a longitudinal axis of rotation and a field-generating coil (61) disposed within an interior cavity, said field-generating coil comprising a plurality of turns of electrical wire, said electrical wire further having a coil lead (61A) extending to and being electrically coupled to a lead of a slip ring (53), said coil lead and said lead of said slip ring defining at a point of securement having a pair of coil leads;

first and second pole pieces (73) affixed to said shaft for rotation therewith, and together defining an interior cavity;

a fan (47) having a central aperture through which the shaft passes, the pair of coil leads passing through a pair of openings in said fan; and

a pair of slip rings (55A, 55B) longitudinally spaced from said fan, each slip ring having a coupling terminal (59A, 59B), said slip rings being secured to said shaft, one of said coupling terminals being secured to one of said pair of coil leads of said coil, and the other one of said coupling terminals being secured to the other one of said pair of coil leads.

However, it fails to disclose a pair of retaining members for securing said pair of coil leads and said pair of coupling terminals to said fan.

Bradfield et al. teach a pair of retaining members (Figure 3) for securing said pair of coil leads and said pair of coupling terminals to said fan for the purpose of locking or fixing the twisted wire portions made by the electrical connections between the ends of the field coils and the slip rings to a fan that is formed of thermoplastic material.

Giamati et al. teach the construction of a brush assembly for a rotating ice protection system having replacement (as defined by The American Heritage® Dictionary of the English Language, Third Edition copyright © 1992 by Houghton Mifflin Company) pieces (Figure 6) for the purpose of having pieces which can be used to build the device or to substitute original worn out pieces.

It would have been obvious to one skilled in the art at the time the invention was made to use the replacement pieces disclosed by Giamati et al. with the retaining members disclosed by

Art Unit: 2834

Bradfield et al. on the fan and slip ring assembly disclosed by Bradfield et al. for the purpose of locking or fixing the twisted wire portions made by the electrical connections between the ends of the field coils and the slip rings to a fan that is formed of thermoplastic material.

5. It must be noted that the method of forming the device, using ultrasonic welding to secure the retaining member to the fan, is not germane to the issue of patentability of the device itself. Therefore, this limitation has not been given patentable weight.

6. With regards to claims 10, 11, 27 and 28, it should be emphasized that "apparatus claims must be structurally distinguishable from the prior art." MPEP 2114. In re Danly, 263 F. 2d 844, 847, 120 USPQ 528, 531 (CCPA 1959) it was held that apparatus claims must be distinguished from prior art in terms of structure rather than function. In Hewlett-Packard Co v Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990), the court held that: "Apparatus claims cover what a device is, not what it does." (emphases in original). To emphasize the point further, the court added: "An invention need not operate differently than the prior art to be patentable, but need only be different" (emphases in original). That is, in an apparatus claim, if a prior art structure discloses all of the structural elements in the claim, as well as their relative juxtaposition, then it reads on the claim, regardless of whether or not the function for which the prior art structure was intended is the same as that of the claimed invention.

7. With regards to claims 12-17, 20-24 and 26, Bradfield in view of Bradfield et al. disclose the construction of a fan and slip ring assembly wherein:

the retaining member secures said point of securement to a portion of said fan, said portion being the location of the securement of a lead of said original slip ring;

said field-generating coil includes a pair of coil leads extending to and being electrically coupled to a pair of leads of a pair of said slip rings to define a pair of points of securement, said pair of points of securement being secured to said fan by a pair of retaining members;

said pair of retaining members comprises:

a receiving area being configured and dimensioned to cover said pair of coil leads and said pair of coupling terminals when said retaining caps are secured to a surface of said fan;

said pair of retaining caps further comprise:

a pair of end portions depending outwardly from a pair of leg portions, said pair of leg portions being secured to each other at one end, and said pair of leg portions defining said receiving area, said end portions being secured to said surface of said fan;

said pair of end portions each have a heat staking portion;

said pair of retaining members secure said pair of coil leads and said pair of coupling terminals to a portion of said fan, said portion being the location of the securement of a lead of said original slip ring. portions, said pair of leg portions being secured to each other at one end, and said pair of leg portions defining said receiving area, said end portions being secured to said surface of said fan;

said retaining member and fan is constructed out of a polymer; and

said leg portions define a triangular receiving area;

as shown in Figures 2, 3 and 4 of Bradfield, and Figures 2 and 3 of Bradfield et al.

Art Unit: 2834

8. With regards to claim 25, the method of forming the device is not germane to the issue of patentability of the device itself. Therefore, this limitation has not been given patentable weight.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pedro J. Cuevas whose telephone number is (703) 308-4904. The examiner can normally be reached on M-F from 8:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor R. Ramírez can be reached on (703) 308-1371. The fax phone numbers for

Application/Control Number: 09/773,274

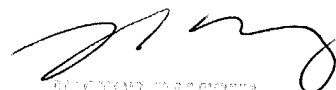
Page 7

Art Unit: 2834

the organization where this application or proceeding is assigned are (703) 305-1341 for regular communications and (703) 305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Pedro J. Cuevas
November 20, 2002


PEDRO J. CUEVAS
UNIT 2834
NOV 20 2002